

## ABSTRACT

The present invention provides a power line terminating circuit and method and a power line relay device for setting indoor power lines to a state adapted to communications by making impedances match each other irrespective of a device connected, thereby enabling noise entering from an electric device to the power lines to be reduced. By a capacitor (33) provided between connection ends (35A) and (35B) and an inductor (34) provided between a termination (32A) of an indoor power line (1A) and the connection end (35A), a series resonance circuit having a series resonance point in a frequency band which is higher than a frequency of a power source voltage and is lower than a communication frequency band is configured. A resistor (31) having a resistance value corresponding to a characteristic impedance of the indoor power line (1A) and an indoor power line (1B) is provided in parallel with the inductor (34). Irrespective of the presence or absence and the kind of a load (electric device (5)), an input impedance of a power line terminating circuit (30U) is made constant in the communication frequency band and reflection caused by impedance mismatching at the terminations of the power lines can be prevented. Thus, communication quality of the power line communication can be maintained.